

Amendments to the Claims

This Listing of Claims will replace all prior versions, and listings, of claims in the application.

Listing of claims

Claim 1 (Currently amended) Method for determining whether a substance is a modulator of a target component in a cell, comprising the steps of:

- (a) preparing a cell, which contains the target component, wherein the cell is immobilized on an extracellular potential-sensitive electrode,
- (b) bringing a substance to be tested in contact with the cell, in a medium which has a salt concentration of ≤ 100 ~~mmol/l~~ mmol/L,
- (c) measuring a signal at the electrode due to the target component, and
- (d) determining the effect of the substance to be tested on the measurement signal.

Claim 2 (Original) Method according to Claim 1 for determining whether a substance is a modulator of a membrane-associated target component.

Claim 3 (Previously presented) Method according to Claim 1 for determining whether a substance is a modulator of an ion-channel/receptor system.

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Claim 4 (Original) Method according to Claim 3, characterized in that the ion-channel/receptor system contains a voltage-controlled, ligand-controlled or mechanically controlled ion channel.

Claim 5 (Original) Method according to Claim 4, characterized in that the ion channel is a potassium channel.

Claim 6 (Original) Method according to Claim 5, characterized in that the potassium channel is selected from hSlo and KV1.3.

Claim 7 (Previously presented) Method according to Claim 3, characterized in that the ion-channel/receptor system contains an NMDA, GABA, AMPA or acetylcholine receptor.

Claim 8 (Previously presented) Method according to Claim 1, furthermore comprising stimulation of the target component in the cell.

Claim 9 (Original) Method according to Claim 8, characterized in that the stimulation of the target component comprises electrical, optical or/and chemical stimulation.

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Claim 10 (Original) Method according to Claim 9, characterized in that the stimulation of the target component comprises the application of a DC voltage or an AC voltage.

Claim 11 (Currently amended) Method according to Claim 1, characterized in that the cell is in contact with an additional electrode, ~~for example a patch clamp~~.

Claim 12 (Previously presented) Method according to Claim 1, characterized in that the potential-sensitive extracellular electrode is arranged on a chip.

Claim 13 (Previously presented) Method according to Claim 1, characterized in that an array comprising a multiplicity of cells immobilized on different electrodes is prepared, and a multiplicity of substances are tested.

Claims 14-22 (Canceled)

Claim 23 (New) The method of claim 11, wherein the additional electrode is a patch clamp.